

IN THE CLAIMS

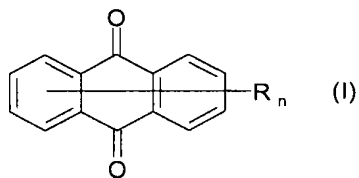
Please amend the claims as follows:

Claim 1. (Currently Amended) A fuel and lubricant additive concentrate comprising:

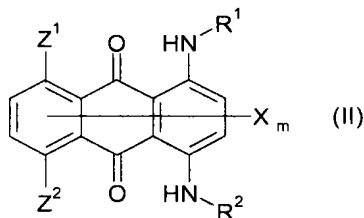
- a) at least one anthraquinone derivative in an amount of at least 0.01% by weight,
- b) at least one carrier oil in a concentration of from 1 to 50% by weight based on the total amount of a), b) and c), and
- c) at least one additive in a concentration of from 25 to 90% by weight based on the total amount of a), b), and c) selected from the group consisting of detergents, dispersants and valve seat wear inhibitors,

wherein the sum of the individual concentrations of a), b) and c) is up to 100% by weight; and

wherein the at least one anthraquinone derivative selected from the group consisting of a compound of formula I:



and formula II:



where

Z^1, Z^2 are each independently hydrogen, hydroxyl, OR, NHR or NR_2 ,
 R^1, R^2 are each independently R or COR,
X is hydrogen, cyano, nitro, hydroxyl, OR, amino, NHR, R or $CH(R^9)(R^{10})$,
n, m are each 0, 1, 2, 3 or 4, and, in each case that n or m is greater than 1, the R
or X radicals may each be the same or different,
 R^9, R^{10} are each independently cyano, COOH or COOR,
and

R is C_1 - C_{20} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_5 - C_7 -cycloalkyl which is optionally substituted by one or more C_1 - C_{20} -alkyl groups which are optionally interrupted by from 1 to 4 oxygen atoms in ether function, saturated heterocyclic five- or six-membered radical which is optionally substituted by one or more C_1 - C_{20} -alkyl groups which are optionally interrupted by from 1 to 4 oxygen atoms in ether function, or is C_6 - C_{10} -aryl which is optionally substituted by one or more halogen, cyano, nitro, hydroxyl, amino, C_1 - C_{20} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_1 - C_{20} -alkoxy, C_1 - C_{20} -alkylamino or C_1 - C_{20} -dialkylamino, or is heteroaryl having from 3 to 12 carbon atoms which is optionally substituted by one or more C_1 - C_{20} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_1 - C_{20} -alkoxy, C_1 - C_{20} -alkylamino or C_1 - C_{20} -dialkylamino, or is C_6 - C_{10} -aryl- C_1 - C_4 -alkyl which is optionally substituted in the aryl radical by one or more halogen, cyano, nitro, hydroxyl, amino, C_1 - C_{20} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_1 - C_{20} -alkoxy, C_1 - C_{20} -alkylamino or C_1 - C_{20} -dialkylamino, or is heteroaryl- C_1 - C_4 -alkyl having from 3 to 12 carbon atoms in the heteroaryl radical, the latter optionally being substituted by one or more C_1 - C_{20} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_1 - C_{20} -alkoxy, C_1 - C_{20} -alkylamino or C_1 - C_{20} -dialkylamino.

Claim 2. (Cancelled).

Claim 3. (Previously Presented) The concentrate according to claim 1, wherein, in formula I, II and III,

Z^1, Z^2 are each independently hydrogen or NHR,
 R^1, R^2 are each independently R,
X is hydrogen, cyano or $CH(R^9)(R^{10})$,
n, m are 0, 1, 2, 3 or 4, and, when n or m is greater than 1, the R or X radicals are the same or different,
 R^9, R^{10} are each independently cyano or COOR, and
R is C_1 - C_{15} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, cyclohexyl which is optionally substituted by one or more C_1 - C_{15} -alkyl groups which are optionally interrupted by from 1 to 4 oxygen atoms in ether function, saturated heterocyclic five- or six-membered radical which is optionally substituted by one or more C_1 - C_{15} -alkyl groups which are optionally interrupted by from 1 to 4 oxygen atoms in ether function, or is C_6 - C_{10} -aryl which is optionally substituted by one or more C_1 - C_{15} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_1 - C_{15} -alkoxy, C_1 - C_{15} -alkylamino or C_1 - C_{15} -dialkylamino, or is heteroaryl having from 3 to 5 carbon atoms which is optionally substituted by one or more C_1 - C_{15} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_1 - C_{15} -alkoxy, C_1 - C_{15} -alkylamino or C_1 - C_{15} -dialkylamino, or is phenyl C_1 - C_4 -alkyl which is optionally substituted in the phenyl radical by one or more C_1 - C_{15} -alkyl

which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C₁-C₁₅-alkoxy, C₁-C₁₅-alkylamino or C₁-C₁₅-dialkylamino, or is heteroaryl-C₁-C₄-alkyl having from 3 to 5 carbon atoms in the heteroaryl radical, the latter optionally being substituted by one or more C₁-C₁₅-alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C₁-C₁₅-alkoxy, C₁-C₁₅-alkylamino or C₁-C₁₅-dialkylamino.

Claim 4. (Cancelled)

Claim 5. (Previously Presented) A mineral oil comprising the concentrate according to Claim 1.

Claim 6. (Previously Presented) The concentrate according to claim 1, comprising at least one carrier oil selected from the group consisting of carrier oils based on:

olefin polymers having M_N = from 400 to 1800,
poly-alpha-olefins,
poly(internal olefins), and
alkoxylated long-chain alcohols or phenols.

Claim 7. (Previously Presented) The concentrate according to claim 1, comprising at least one polyalkene alcohol polyalkoxylate carrier oil.

Claim 8. (Previously Presented) The concentrate according to claim 1, comprising at least one carrier oil based on hydrogenated or nonhydrogenated polybutene or hydrogenated or nonhydrogenated polyisobutene.

Claim 9. (Previously Presented) The concentrate according to claim 1, wherein said at least one additive is selected from the group consisting of:

polyisobutenamines,

poly(iso)butenamines,

hydroxyl-containing polyisobutenamines,

polyetheramines,

polyisobutene Mannich bases, and

compounds which have at least one hydrophobic hydrocarbon radical having a number-average molecular weight of from 85 to 20 000 and at least one polar moiety selected from:

(i) mono- or polyamino groups having up to 6 nitrogen atoms, of which at least one nitrogen atom has basic properties;

(ii) nitro groups, optionally in combination with hydroxyl groups;

(iii) hydroxyl groups in combination with mono- or polyamino groups, in which at least one nitrogen atom has basic properties;

(iv) carboxyl groups or their alkali metal or their alkaline earth metal salts;

(v) sulfonic acid groups or their alkali metal or alkaline earth metal salts;

(vi) polyoxy-C₂- to - C₄-alkylene groups which are terminated by hydroxyl groups, mono- or polyamino groups, in which at least one nitrogen atom has basic properties, or by carbamate groups;

(vii) carboxylic ester groups;

(viii) moieties derived from succinic anhydride and having hydroxyl and/or amino and/or amido and/or imido groups; and

(ix) moieties obtained by Mannich reaction of substituted phenols with aldehydes and mono- or polyamines.

Claim 10. (Previously Presented) The concentrate according to claim 1, comprising at least one anthraquinone derivative of formula I.

Claim 11. (Previously Presented) The concentrate according to claim 1, comprising at least one anthraquinone derivative of formula II.

Claim 12. (Cancelled).

Claim 13. (Currently Amended) A method for preparing the fuel and lubricant additive concentrate of Claim 1, comprising mixing together:

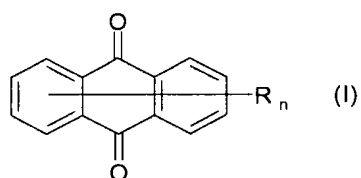
a) at least one anthraquinone derivative in an amount of at least 0.01% by weight,

b) at least one carrier oil in a concentration of from 1 to 50% by weight based on the total amount of a), b) and c), and

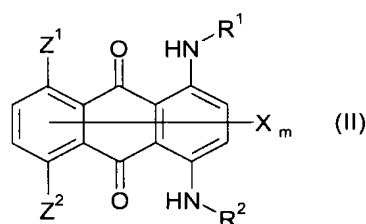
c) at least one additive in a concentration of from 25 to 90% by weight based on the total amount of a), b), and c) selected from the group consisting of detergents, dispersants and valve seat wear inhibitors,

wherein the sum of the individual concentrations of a), b) and c) is up to 100% by weight; and

wherein the at least one anthraquinone derivative selected from the group consisting of a compound of formula I:



and formula II:



where

Z^1, Z^2 are each independently hydrogen, hydroxyl, OR, NHR or NR_2 ,

R^1, R^2 are each independently R or COR,

X is hydrogen, cyano, nitro, hydroxyl, OR, amino, NHR, R or $CH(R^9)(R^{10})$,

n, m are each 0, 1, 2, 3 or 4, and, in each case that n or m is greater than 1, the R or X radicals may each be the same or different,

R^9, R^{10} are each independently cyano, COOH or COOR,

and

R is C_1 - C_{20} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_5 - C_7 -cycloalkyl which is optionally substituted by one or more C_1 - C_{20} -alkyl groups which are optionally interrupted by from 1 to 4 oxygen atoms in ether function, saturated heterocyclic five- or six-membered radical which is optionally substituted by one or more C_1 - C_{20} -alkyl groups which are optionally interrupted by from 1 to 4 oxygen atoms in ether function, or is C_6 - C_{10} -aryl which is optionally substituted by one or more halogen, cyano, nitro, hydroxyl, amino, C_1 - C_{20} -alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C_1 - C_{20} -alkoxy, C_1 - C_{20} -alkylamino or C_1 - C_{20} -dialkylamino, or

is heteroaryl having from 3 to 12 carbon atoms which is optionally substituted by one or more C₁-C₂₀-alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C₁-C₂₀-alkoxy, C₁-C₂₀-alkylamino or C₁-C₂₀-dialkylamino, or is C₆-C₁₀-aryl-C₁-C₄-alkyl which is optionally substituted in the aryl radical by one or more halogen, cyano, nitro, hydroxyl, amino, C₁-C₂₀-alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C₁-C₂₀-alkoxy, C₁-C₂₀-alkylamino or C₁-C₂₀-dialkylamino, or is heteroaryl-C₁-C₄-alkyl having from 3 to 12 carbon atoms in the heteroaryl radical, the latter optionally being substituted by one or more C₁-C₂₀-alkyl which is optionally interrupted by from 1 to 4 oxygen atoms in ether function, C₁-C₂₀-alkoxy, C₁-C₂₀-alkylamino or C₁-C₂₀-dialkylamino.

Claim 14 (Cancelled)